

AMENDMENTS TO THE CLAIMS

Please amend claims 24 and 28 as follows:

1-19. (Cancelled)

20. (Previously Presented) A particulate coformulation of an active substance and an additive, which is a solid dispersion of one component in the other formed from a co-precipitation process containing a supercritical fluid, wherein each particle contains a particle core having a first concentration by weight of the active substance within a range from about 90% to about 100%, a particle surface having a second concentration by weight of the active substance within a range from about 0% to about 5%, a relative additive concentration increasing radially outwards along a finite gradient and the particles are spherical or approximately spherical particles having a volume mean diameter of less than 100 μm , or needle-like particles having a volume mean length within a range from about 5 μm to about 100 μm and a volume mean thickness within a range from about 0.5 μm to about 5 μm , or plate-like particles having a volume mean thickness within a range from about 0.5 μm to about 5 μm .

21. (Previously Presented) A particulate coformulation according to claim 20, wherein the particle surface is an additive-rich surface without a distinct physical boundary between the particle core and the particle surface.

22. (Previously Presented) A particulate coformulation according to claim 20, wherein the relative additive concentration has a continuous rate of change across the finite gradient.

23. (Previously Presented) A particulate coformulation according to claim 20, wherein an active substance:additive ratio, at the particle surface, is sufficiently low for the additive to form a protective surface layer around the active substance.

24. (Currently Amended) A particulate coformulation according to claim 20, wherein the additive is a taste masking agent or an odor masking agent, and wherein an active substance:additive weight ratio, at the particle surface, is sufficiently low for there to be no detectable release of the active substance for at least 30 seconds after the coformulation comes into contact with saliva in a mouth of an individual.
25. (Previously Presented) A particulate coformulation according to claim 20, wherein the particle surface contains no exposed active substance.
26. (Previously Presented) A particulate coformulation according to claim 20, which comprises a pharmaceutical agent or a nutraceutical agent or a foodstuff.
27. (Previously Presented) A particulate coformulation according to claim 20, wherein the additive is an oligomeric material or a polymeric material.
28. (Currently Amended) A particulate coformulation according to claim 20, wherein the additive is a substance capable of protecting the active substance from at least one external effect selected from the group consisting of heat, light, moisture, oxygen contaminants or chemical contaminants, or reducing incompatibilities between the active substance and another material while processed or stored, or delaying, slowing or targeting the release of the active substance, or masking a flavor or an odor of the active substance.
29. (Previously Presented) A particulate coformulation according to claim 28, wherein the additive is a taste masking agent or an odor masking agent.
30. (Original) A particulate coformulation according to claim 20, wherein the active substance comprises a pharmaceutically active substance.

31. (Original) A particulate coformulation according to claim 30, wherein both the active substance and the additive comprise pharmaceutically active substances for co-administration.
32. (Original) A particulate coformulation according to claim 20, wherein the active substance is a carrier, diluent or bulking agent for the additive.
33. (Original) A particulate coformulation according to claim 20, wherein the active substance is present in a crystalline form and the additive is present in an amorphous form.
34. (Previously Presented) A particulate coformulation according to claim 33, wherein differential scanning calorimetry or X-ray diffraction analysis indicates an active substance crystallinity is less than an initial crystallinity of the active substance alone.
35. (Previously Presented) A particulate coformulation according to claim 34, wherein an active substance: additive concentration ratio is such that the active substance crystallinity is within a range from about 20% to about 95% as compared to the active substance alone.
36. (Previously Presented) A particulate coformulation according to claim 20, wherein the particles are the spherical or approximately spherical particles having a volume mean diameter of at least about 0.5 μm .
37. (Previously Presented) A particulate coformulation according to claim 20, wherein the active substance concentration is about 70% w/w or greater.
38. (Previously Presented) A particulate coformulation according claim 37, wherein the active substance concentration is about 80% w/w or greater.

39. (Previously Presented) A particulate coformulation according to claim 20, wherein the additive concentration is about 10% w/w or greater.

40. (Cancelled)

41. (Previously Presented) A pharmaceutical composition which includes a coformulation as in one of claims 20 to 39.

42. (Previously Presented) A foodstuff or nutraceutical composition which includes a coformulation as in one of claims 20 to 39.

43. (Previously Presented) The particulate coformulation of claim 20, wherein the particles are the spherical particles having a volume mean diameter within a range from about 0.5 μm to about 20 μm .

44. (Previously Presented) The particulate coformulation of claim 43, wherein the particles are the spherical particles having a volume mean diameter within a range from about 0.5 μm to about 10 μm .

45. (Previously Presented) The particulate coformulation of claim 20, wherein the particles are the spherical particles having a volume mean diameter of less than about 5 μm .

46. (Previously Presented) The particulate coformulation of claim 20, wherein the additive is a taste masking agent and the particles are the spherical particles having a volume mean diameter within a range from about 0.5 μm to about 20 μm .

47. (Previously Presented) The particulate coformulation of claim 43, wherein the particles are the spherical particles having a volume mean diameter within a range from about 0.5 μm to about 10 μm .

48. (Previously Presented) The particulate coformulation of claim 20, wherein the additive is a taste masking agent and the particles are the spherical particles having a volume mean diameter of less than about 5 μm .

49. (Previously Presented) A particulate coformulation, comprising:

an active substance and an additive contained within particulate formed from a co-precipitation process containing a supercritical fluid, wherein each particle contains a particle core having a first concentration by weight of the active substance within a range from about 90% to about 100%, a particle surface having a second concentration by weight of the active substance within a range from about 0% to about 5%, an additive concentration having a finite gradient increasing radially from a center towards the particle surface and the particles are spherical or substantially spherical particles having a volume mean diameter of less than 100 μm .

50. (Previously Presented) A particulate coformulation, comprising:

an active substance and a taste masking agent contained within particulate formed from a co-precipitation process containing a supercritical fluid, wherein each particle contains a particle core having a first concentration by weight of the active substance within a range from about 90% to about 100%, a particle surface having a second concentration by weight of the active substance within a range from about 0% to about 5%, a taste masking agent concentration having a finite gradient increasing radially from a center towards the particle surface and the particles are spherical or substantially spherical particles having a volume mean diameter of about 20 μm or less.

51. (Currently Amended) A particulate coformulation, comprising:

an active substance and an additive contained within particulate formed from a co-precipitation process containing a supercritical fluid; and

an additive concentration having a finite gradient increasing radially towards a particle surface of each particle within the particulate, wherein each particle contains a particle core having a first concentration by weight of the active substance within a range from about 90% to about 100% and the particle surface having a second

concentration by weight of the active substance within a range from about 0% to about 5%.

52. (Previously Presented) The particulate coformulation of claim 51, wherein the particle surface is an additive-rich surface without a distinct physical boundary between the particle core and the particle surface.

53. (Previously Presented) The particulate coformulation of claim 51, wherein the additive concentration has a continuous rate of change across a radius of the particle.

54. (Previously Presented) The particulate coformulation of claim 51, wherein an active substance:additive ratio on the particle surface is sufficiently low to form a protective surface layer of the additive around the particle.

55. (Previously Presented) The particulate coformulation of claim 54, wherein the additive is a taste masking agent or an odor masking agent and the protective surface layer provides no detectable release of the active substance for at least 30 seconds after the coformulation comes into contact with saliva in a mouth of an individual.

56. (Previously Presented) The particulate coformulation of claim 54, wherein the particle surface contains no exposed active substance.

57. (Previously Presented) The particulate coformulation of claim 51, which comprises a pharmaceutical agent or a nutraceutical agent or a foodstuff.

58. (Previously Presented) The particulate coformulation of claim 51, wherein the additive is an oligomeric material or a polymeric material.

59. (Previously Presented) The particulate coformulation of claim 51, wherein the additive is a substance capable of protecting the active substance from at least one

external effect selected from the group consisting of heat, light, moisture, oxygen contaminants and chemical contaminants.

60. (Previously Presented) The particulate coformulation of claim 51, wherein the additive is a substance capable of reducing incompatibilities between the active substance and another material during processing or storage.

61. (Previously Presented) The particulate coformulation of claim 51, wherein the additive is a substance capable of delaying, slowing or targeting release of the active substance.

62. (Previously Presented) The particulate coformulation of claim 51, wherein the additive is a taste masking agent or an odor masking agent.

63. (Previously Presented) The particulate coformulation of claim 51, wherein the active substance contains a pharmaceutically active substance.

64. (Previously Presented) The particulate coformulation of claim 63, wherein the additive contains another pharmaceutically active substance for co-administration.

65. (Previously Presented) The particulate coformulation of claim 51, wherein the active substance is a carrier, a diluent or a bulking agent for the additive.

66. (Previously Presented) The particulate coformulation of claim 51, wherein the active substance is in a crystalline state and the additive is in an amorphous state.

67. (Previously Presented) The particulate coformulation of claim 66, wherein a crystallinity of the active substance within the particulate is less than an initial crystallinity of the active substance alone.

68. (Previously Presented) The particulate coformulation of claim 67, wherein an active substance:additive concentration ratio is such that the crystallinity of the active substance is within a range from about 20% to about 95% as compared to the active substance alone.

69. (Previously Presented) The particulate coformulation of claim 51, wherein the particles are spherical or approximately spherical particles having a volume mean diameter within a range from about 0.5 μm to about 100 μm .

70. (Previously Presented) The particulate coformulation of claim 51, wherein the particles are needle-like particles having a volume mean length within a range from about 5 μm to about 100 μm and a volume mean thickness within a range from about 0.5 μm to about 5 μm .

71. (Previously Presented) The particulate coformulation of claim 51, wherein the particles are plate-like particles having a volume mean thickness within a range from about 0.5 μm to about 5 μm .

72. (Previously Presented) The particulate coformulation of claim 51, wherein an active substance concentration is about 70% w/w or greater.

73. (Previously Presented) The particulate coformulation of claim 72, wherein the active substance concentration is about 80% w/w or greater.

74. (Previously Presented) The particulate coformulation of claim 51, wherein the additive concentration is about 10% w/w or greater.

75. (Previously Presented) The particulate coformulation of claim 69, wherein the volume mean diameter is within a range from about 0.5 μm to about 20 μm .

76. (Previously Presented) The particulate coformulation of claim 75, wherein the volume mean diameter is within a range from about 0.5 μm to about 10 μm .

77. (Previously Presented) The particulate coformulation of claim 51, wherein the volume mean diameter is about 5 μm or less.

78. (Previously Presented) The particulate coformulation of claim 51, wherein the additive is a taste masking agent and the particles are spherical particles having a volume mean diameter within a range from about 0.5 μm to about 20 μm .

79. (Previously Presented) The particulate coformulation of claim 78, wherein the volume mean diameter is within a range from about 0.5 μm to about 10 μm .

80. (Previously Presented) The particulate coformulation of claim 51, wherein the additive is a taste masking agent and the particles are spherical particles having a volume mean diameter of about 5 μm or less.